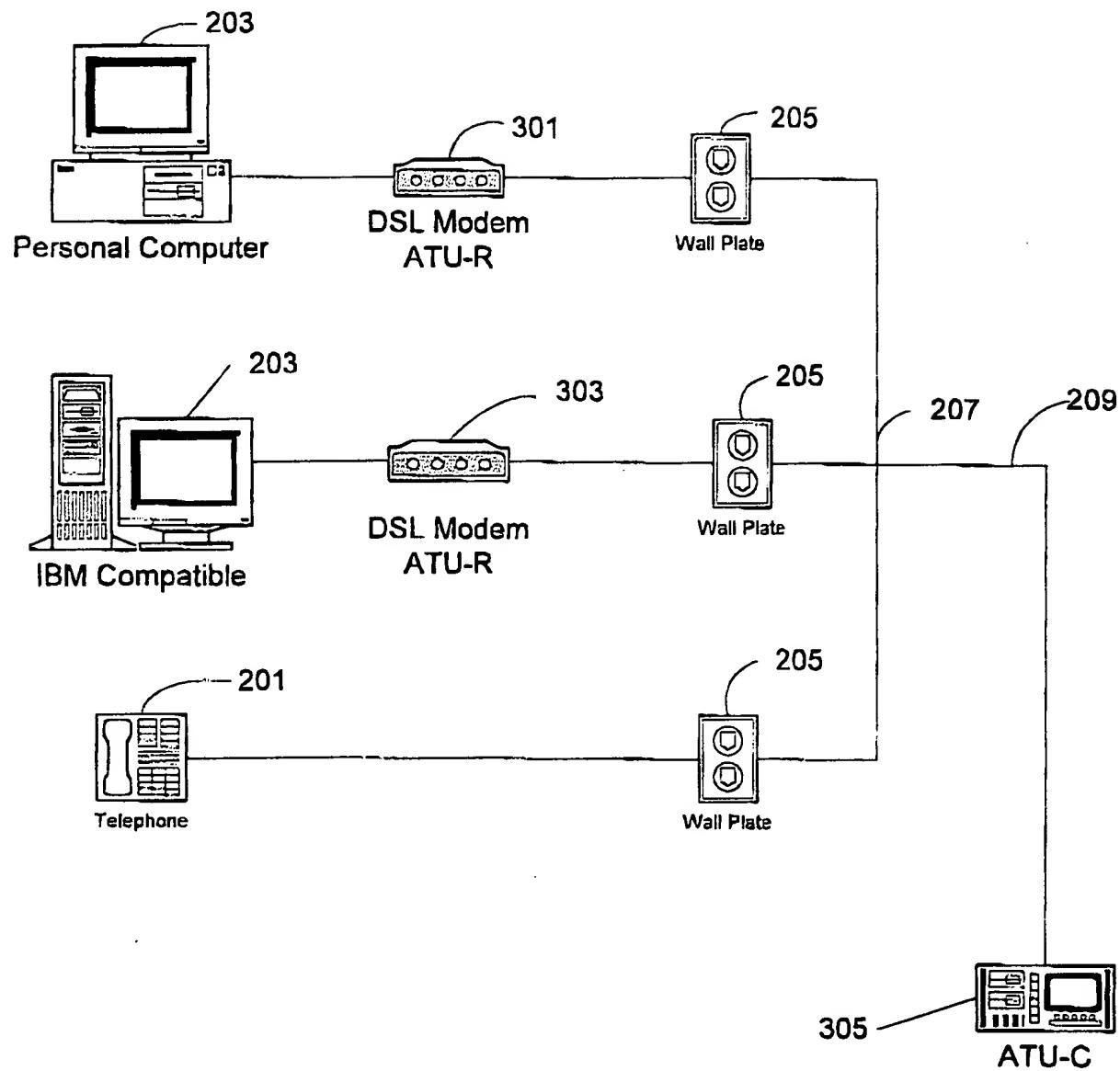
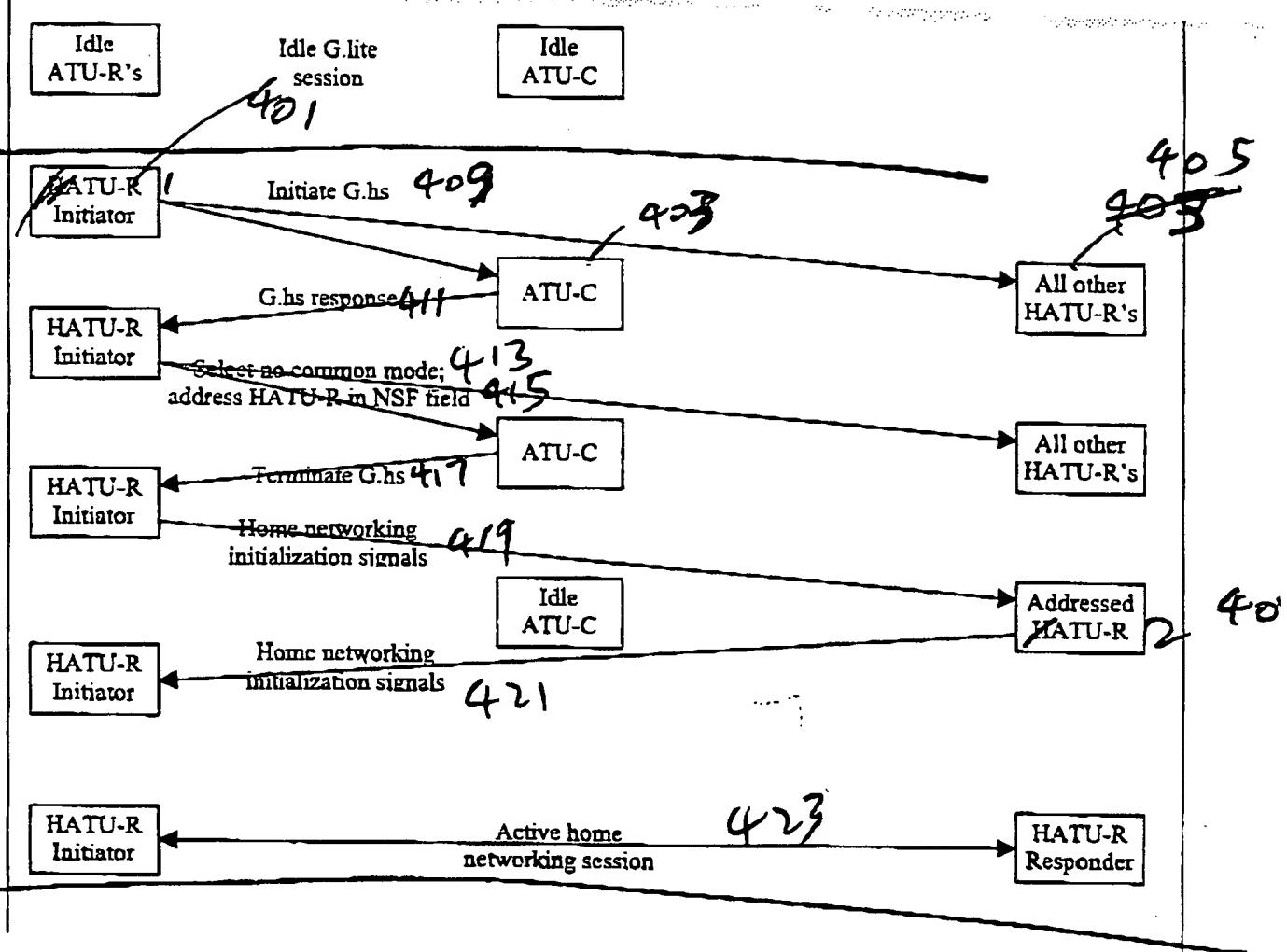


Figure 1



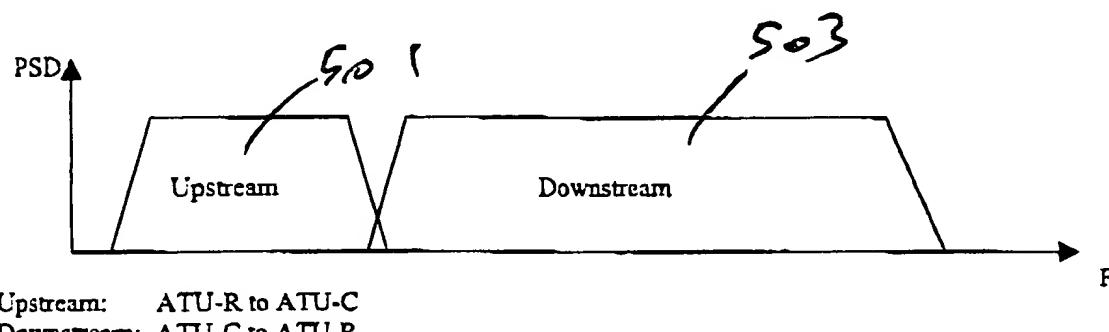


F
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G
U
R
E

3

ATU-R: ADSL Transceiver Unit - Remote end
ATU-C: ADSL Transceiver Unit - Central Office end

Standard G.lite operation (i.e. communication between ATU-R and ATU-C)

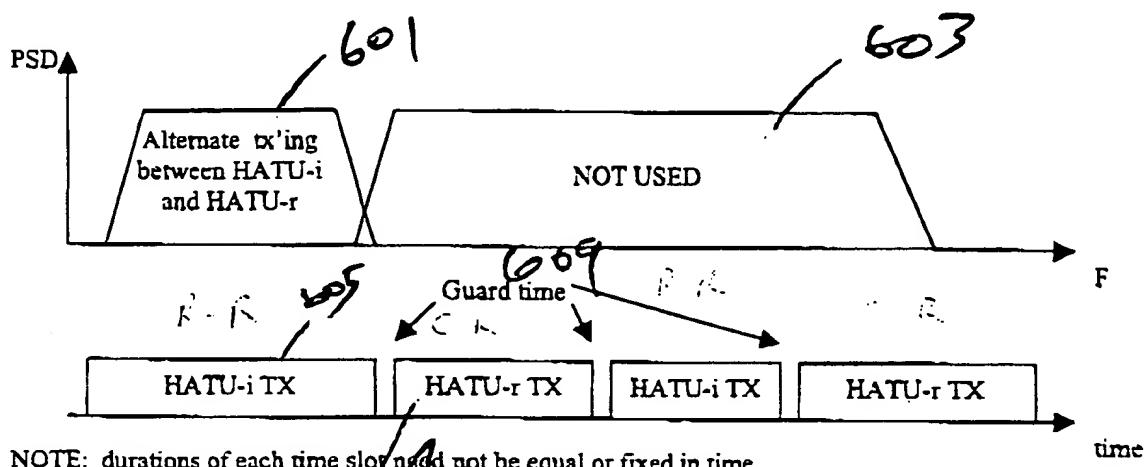


Upstream: ATU-R to ATU-C
Downstream: ATU-C to ATU-R

Figure 1: Standard G.lite operation

F
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E
S

Home networking using G-lite (ie. communication between HATU-i and HATU-r)



NOTE: durations of each time slot need not be equal or fixed in time.

Homestream-i: ATU-R initiator to ATU-R responder

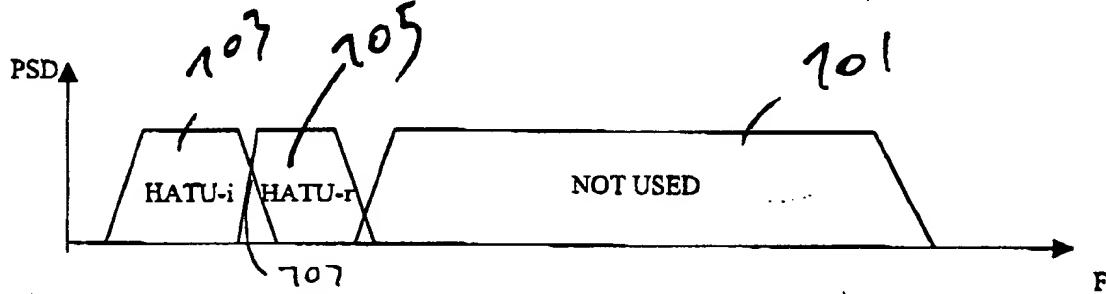
Homestream-r: ATU-C responder to ATU-R initiator

4A
+
4B

Home Networking using Upstream Band only – Time Domain Duplexing (TDD)

F
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G
U
R
E
S

Home networking using G-lite (ie. communication between HATU-i and HATU-r)



NOTE: Band separation point can be moved and order of bands can be reversed.

Homestream-i: ATU-R initiator to ATU-R responder

Homestream-r: ATU-C responder to ATU-R initiator

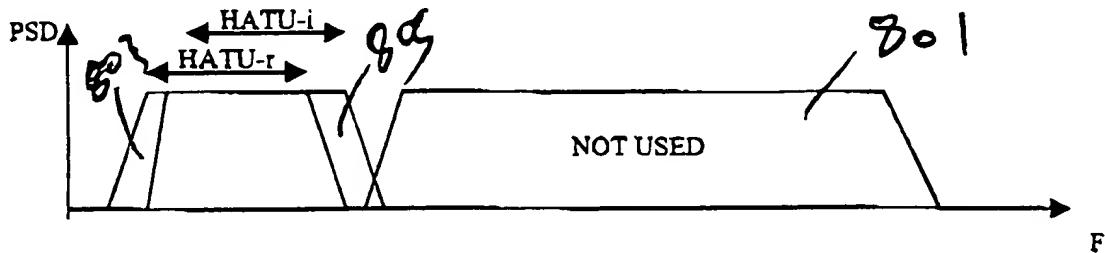
5A
+
5B

3: Home Networking using Upstream Band only – Frequency Domain Duplexing (FDD)

The next option, overlapped spectrum is often called echo cancelled duplexing (EC).

F
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Home networking using G-lite (ie. communication between HATU-i and HATU-r)



NOTE: Bands may be partially or fully overlapped; order of bands does not matter.

Homestream-i: ATU-R initiator to ATU-R responder

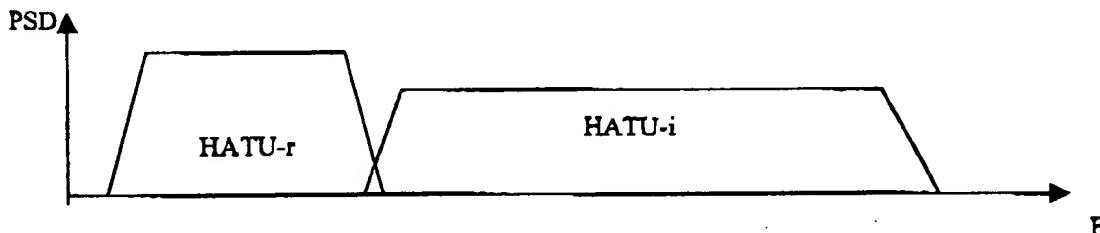
Homestream-r: ATU-C responder to ATU-R initiator

6

Figure 4: Home Networking using Upstream Band only – Overlapped Spectrum (EC)

F
I
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U
R
E

Home networking using G-lite (ie. communication between HATU-i and HATU-r)



NOTE: Order of bands does not matter; the whole bandwidth need not be used. The power in the G-lite downstream band may have to be reduced to avoid generating unsuitable levels of crosstalk.

Homestream-i: ATU-R initiator to ATU-R responder

Homestream-r: ATU-C responder to ATU-R initiator

7

Figure 5: Home Networking using Full G-lite Band – Overlapped Spectrum (EC)